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Badhamiopsis cavifera **(Myxomycetes), a new species from Japan**

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日本産変形菌の1新種 *Badhamiopsis cavifera*

Recently Mr. Hiromitsu Hagiwara of the National Science Museum sent us an interesting myxomycete specimen. It shows some characters intermediate between *Badhamiopsis* and *Diderma* (or *Didymium*). We describe it as a new species in this paper.

Badhamiopsis cavifera Nann.-Brem. & Y. Yamamoto, n. sp. (Fig. 1)

Sporangia dispersa, sessilia, pulvinata, 0.3–0.4 mm diam., eburnea, nitida, punctata. Peridium leve, flavo-brunneum, granulis calcareis albis 1–1.5 μm diam., invaginationibus calcareis latioribus etiam gracilibus excalcareis. Capillitium rarum, obscurum, parce ramosum et anastomosans. Sporae subglobosae, pallide cinereae luce transmissa, 13.5–15 μm diam., dense minuteque spinulosae. Plasmodium ignotum.

Holotype: Y. Yamamoto 4813 in TNS (isotype: NENB 15.201) on the mossy bark of an unidentified living tree, Kenmin-no-mori, Yaita-shi, Tochigi Pref., Collector unknown, 20 VII 1986.

Fructifications sporangiate. Sporangia scattered, sessile, pulvinate, creamy white, shining, with many small dimples, 0.3–0.4 mm diam. and slightly less tall. Hypothallus inconspicuous. Peridium membranous, yellow-brown, with white lime globules, 1–1.5 μm diam., with wide limy and slender limeless tubular invaginations, which are more or less perpendicular in the sporangium, between the base and apex; the apices of the larger invaginations correspond to the dimples in the peridium. Columella none. Capillitium scanty, in part merging with the invaginations, consisting of simple and more or less straight or undulate or scantily branching and anastomosing, violet-brown tubules, with a few or no lime granules, with axillary membranous, sometimes perforated expansions,

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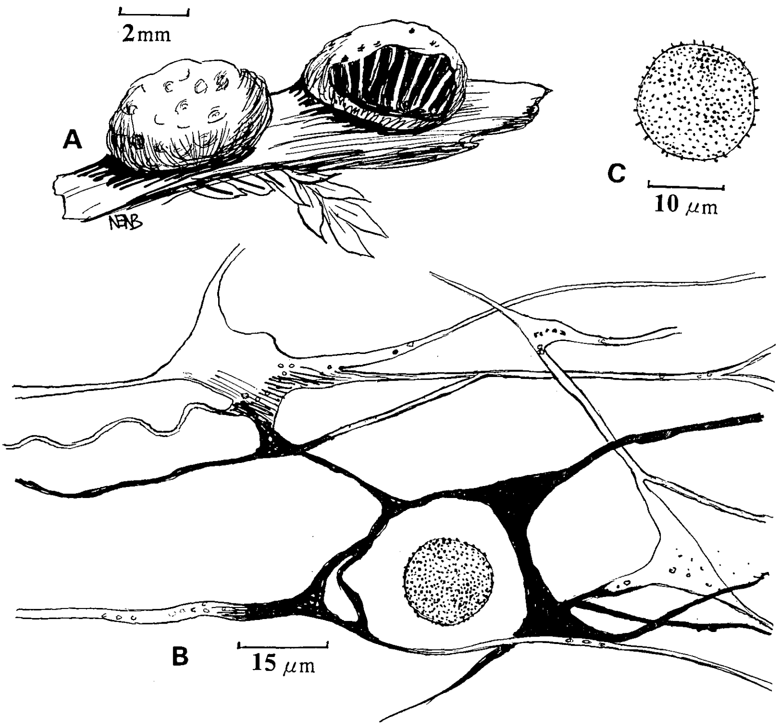

Fig. 1. *Badhamiopsis cavifera*. A. Two sporangia, one of them on the right showing the trabeculae. B. Part of the capillitium and a spore. C. A spore. From the type specimen.

sometimes with dark, bulbous, limeless swellings. Spores pale grey, 13.5-15 μm diam., with dense, dark, minute, up to 0.5 μm long spinules. Plasmodium not observed.

Badhamiopsis is characterized by globular lime granules on the peridium and by its peridial columnar invaginations stretching from the base to the apex of the fructification. Similar limy invaginations of the peridium into the fructifications, reaching to the base or nearly so, can be found in *Didymium sturgisii* Hagelst., and in some specimens of *D. squamulosum* (Alb. & Schwein.) Fries (the lime in the columns is crystalline in these species) and very slender, limeless ones in *Trabrooksia applanata* Keller (provisionally placed in the Didymiaceae by Keller) and *Badhamiopsis ainoae* (Yamashiro) Brooks & Keller. These species can be distinguished from our new species by being predominantly

plasmodiocarpous and by having smaller spores. *Didymium* species, of course, can also be recognized by their crystalline lime, and *Trabrooksia* by its total lack of lime. From *B. ainoae* our specimen differs also in its minutely spinulose spores, in its smooth, crustose, limy peridium, which is yellow-brown and not colourless in transmitted light, and by the presence of true, even though it is scanty, capillitium. The definition of the genus *Badhamiopsis* should be widened to accomodate species with (some) capillitium and sporangiate fructifications.

We wish to express our deep appreciation to Mr. Hagiwara for giving us a chance to examine the interesting specimen.

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最近，筆者らは，国立科学博物館筑波実験植物園の萩原博光氏より，日本変形菌研究会の会員（氏名不詳）が採集した1標本を頂き，検討する機会を得た。この標本は *Badhamiopsis* と *Diderma* や *Didymium* との中間的形態をもち，大変興味深いものである。筆者らはこれを検討した結果，新種と判断し，*Badhamiopsis cavifera* と名付けて記載した。

□Cooke, W.B.: **The fungi of our mouldy earth** 467pp. 1986. Beihefte Nova Hedwig. 85. J. Cramer, Berlin. 排水や汚水処理施設などの有機物汚染水域から得られた真菌類について，検索表を付し，種ごとに採集・分離のデータをまとめたものである。同じ著者の “Check list of fungi isolated from polluted water and sewage” (1957) と “Our mouldy earth, a study of the fungi of our environment with emphasis on water” (1970) を下敷きにしている。全菌群にわたり，属だけでも300を大きく上まわっており，思いがけない種の記録もある。菌類研究にとって菌株保存の重要性は言を待たないが，自然の中からいつでも目的の菌を入手できる能力を貯えておくことも極めて重要である。ところが罹病植物の病斑や大形子実体以外の採集では “めくら撃ち“ の面があり，それだけに従来の採集データはたいへん大切である。本書は単に応用的価値だけでなく，そういった意味でも有益な基礎資料集といえる。今後，このような立場でのいろいろな基礎資料の集成が強く望まれる。なお，本書の末尾には114の線画が添えられているが，原図を写真版として製版したらしく，スペースに無駄が多く，不鮮明なものも少なくない。著名な Cramer 社にしては妙な図版の作り方をしたものである。改善を望む。 （三浦宏一郎）